

CONDUIT AND CABLE SCHEDULE STAGE II AND III

CONDUIT DESIGNATION	CIRCUIT No.	FROM	TO	SERVICE	CONDUIT NUMBER OF SETS	CONDUIT SIZE	CABLE (PER CDT.) OR BUSWAY NUMBER & SIZE	TYPE	REMARKS	CONDUIT DESIGNATION	CIRCUIT No.	FROM	TO	SERVICE	CONDUIT NUMBER OF SETS	CONDUIT SIZE	CABLE (PER CDT.) OR BUSWAY NUMBER & SIZE	TYPE	REMARKS
MEDIUM VOLTAGE 15KV CABLE (SEE DWG. #E-53, RISER DIAGRAM)										FDR'S - TRANSFER FROM EXIST. SWGR "R" BUS (SEE DWG. #E-54, ONE LINE DIAGRAM)									
PF-ASC	—	EXIST. 15KV SPLICE CABINET	BKR. #HV-B1	13.8KV	1	4"	3-350MCM	EPR	"Y" SPLICE TO EXISTING RISER CABLE	R-4	1-4	SWGR. BUS #1	ATS-75SR	480V	4	3"	3-350MCM	XHHW-2	
PF-ASC TEMP	—	BKR. #HV-B1	EXIST. TR-5	13.8KV	1	4"	3-350MCM	EPR	TEMPORARY FDR.		—	ATS-75SR	SWGR. BUS #EL	480V	4	3"	3-350MCM	XHHW-2	RUN FEEDERS BETWEEN EQUIPMENT
PF-ASC	—	EXIST. 15KV SPLICE CABINET	BKR. #HV-B2	13.8KV	1	4"	3-350MCM	EPR	"Y" SPLICE TO EXISTING RISER CABLE	R-5	2-4	SWGR. BUS #2	MCC-M575R	480V	3	3 1/2"	3-500MCM	XHHW-2	
PF-ASC TEMP	—	BKR. #HV-B2	EXIST. TR-6	13.8KV	1	4"	3-350MCM	EPR	TEMPORARY FDR.	R-7	1-3	SWGR. BUS #1	EXIST. P.B. #3	480V	1	3 1/2"	3-500MCM	XHHW-2	
PF-ASC	—	EXIST. 15KV SPLICE CABINET	BKR. #HV-B3	13.8KV	1	4"	3-350MCM	EPR	"Y" SPLICE TO EXISTING RISER CABLE	R-8	2-3	SWGR. BUS #2	EXIST. P.B. #3	480V	1	3 1/2"	3-500MCM	XHHW-2	
PF-ASC TEMP	—	BKR. #HV-B3	EXIST. TR-7	13.8KV	1	4"	3-350MCM	EPR	TEMPORARY FDR.	R-9	3-4	SWGR. BUS #3	EXIST. PONYA ATS-70	480V	1	3 1/2"	3-500MCM	XHHW-2	
PF-ASC	—	EXIST. 15KV SPLICE CABINET	BKR. #HV-B4	13.8KV	1	4"	3-350MCM	EPR	"Y" SPLICE TO EXISTING RISER CABLE	R-10	2-6	SWGR. BUS #2	EXIST. P.B. #1	480V	1	2 1/2"	3-500MCM	XHHW-2	
PF-ASC TEMP	—	BKR. #HV-B4	EXIST. TR-8	13.8KV	1	4"	3-350MCM	EPR	TEMPORARY FDR.										
FDR'S - TRANSFER FROM EXIST. SWGR "L" BUS (SEE DWG. #E-54, ONE LINE DIAGRAM)										FDR'S - TRANSFER FROM EXIST. SWGR BUS "EL" (SEE DWG. #E-54, ONE LINE DIAGRAM)									
L-1	3-5	SWGR. BUS #3	ATS-75SL	480V	5	3 1/2"	3-500MCM	XHHW-2		R-10	EL-1	SWGR. BUS #EL	EXIST. P.B. #1	480V	1	2 1/2"	3-250MCM	XHHW-2	
	—	ATS-75SL	EDP #EL-A76E	480V	5	3 1/2"	3-500MCM	XHHW-2		R-11	EL-2	SWGR. BUS #EL	EXIST. P.B. #1	480V	1	3 1/2"	3-500MCM	XHHW-2	
L-3-TEMP	4-6	SWGR. BUS #4	EXISTING TRANSF. #TR-L3	480V	2	3 1/2"	3-500MCM	XHHW-2	PROVIDE CABLE LUGS AT SWGR. BREAKER	R-12	EL-3	SWGR. BUS #EL	EXIST. P.B. #1	480V	1	3 1/2"	3-500MCM	XHHW-2	
L-3	4-1	SWGR. BUS #4	TRANSF. #TR-L3	480V	2	3 1/2"	3-500MCM	XHHW-2		R-13	EL-4	SWGR. BUS #EL	ELEV. DISTRIBUTION PNL #EL-A76E	480V	2	3"	3-350MCM	XHHW-2	VIA P.B. #5
L-3	—	CB-L3	EXIST. 1600A BUSWAY	208/120V	1	—	2000A BUSWAY	3#, F.N. GND.		EMERG. POWER FDR'S FROM ELEC. CLOSET "C" (SEE DWG. #E-54, ONE LINE DIAGRAM UNLESS OTHERWISE NOTED)									
L-4a	4-2	SWGR. BUS #3	BUSWAY CAP	480/277V	1	—	2000A BUSWAY	3#, F.N. GND.		A-2	—	EXIST. POW. PNL EPC-75A	ATS-75SL	480V	2	3 1/2"	3-500MCM	XHHW-2	VIA P.B. #15
L-4b	3-2	SWGR. BUS #4	EXIST. 1600A BUSWAY	480/277V	1	—	2000A BUSWAY	3#, F.N. GND.		A-3	—	EXIST. P.B. #1	ATS-75SR	480V	1	2"	3-3/3/0	XHHW-2	
L-7	4-4	SWGR. BUS #4	MCC-MN75L	480V	3	3 1/2"	3-500MCM	XHHW-2			—	PANEL #E-75A	P.B. "A"	208V	1	1 1/4"	2 #2	XHHW-2	SEE DWG. #E-94 ONE LINE DIAGRAM & PLAN
R-1-TEMP	3-3	SWGR. BUS #3	EXISTING TRANSF. #TR-R1	480V	2	3 1/2"	3-500MCM	XHHW-2	PROVIDE CABLE LUGS AT SWGR. BREAKER		—	P.B. "A"	DISC. SW. NORM. & U.P.S.	208V	1	1 1/4"	2 #2	XHHW-2	
A-3	4-3	SWGR. BUS #1	PNL DP-75S	480/277V	2	3 1/2"	4-500MCM	XHHW-2	REMOVE TEMP. FDR. L-5-TEMP INSTALLED IN STAGE I	UPS-75S	—	U.P.S.	PANEL CP-75S	120/240V	1	1 1/4"	3 #2	XHHW-2	SEE DWG. #E-103, EXTEND FDR'S TO TEMP. UPS
										CP-75-BP	—	PULL BOX	UPS-SS-75S	120/240V	1	1 1/4"	3 #2	XHHW-2	BY-PASS POWER FOR SS-75S U.P.S. SEE DWG. #E-94 & E-103.
FDR'S - TRANSFER FROM EXIST. SWGR "R" BUS (SEE DWG. #E-54, ONE LINE DIAGRAM)										TEMPORARY 480/277V. BUSWAY (SEE DWG. #E-54, ONE LINE DIAGRAM)									
R-1	2-1	SWGR. BUS #2	TRANSF. #TR-R1	480V	2	3 1/2"	3-500MCM	XHHW-2		I.B.	1-2	SWGR. BUS #3	EXIST. COLLECTOR BUSWAY	480/277V	1	—	4000A BUSWAY	3#, F.N. GND.	TEMPORARY BUSWAY
R-1	—	CB-R1	EXIST. 1600A BUSWAY	208/120V	1	—	2000A BUSWAY	3#, F.N. GND.											
R-2a	1-2	SWGR. BUS #1	BUSWAY CAP	480/277V	1	—	2000A BUSWAY	3#, F.N. GND.											
R-2b	2-2	SWGR. BUS #2	EXIST. 1600A BUSWAY	480/277V	1	—	2000A BUSWAY	3#, F.N. GND.											
R-3	2-7	SWGR. BUS #2	EXIST. P.B. #5	480V	1	3 1/2"	3-500MCM	XHHW-2											

- 1 - REMOVE EXIST. & INSTALL COPPER CABLE LUGS
- 2 - SPLICE TO EXIST. AL. CABLE
- 3 - CONNECT TO EXIST. AL. BUSWAY

FOR EXIST. CDT. & WIRE SEE DWG #E-110

THE PORT AUTHORITY OF NY & NJ

Peter K. Swamy
ENGINEERING PROGRAM MANAGER
WORLD TRADE CENTER
CHIEF ELECTRICAL ENGINEER

Engineering Department
Design Divisions
The World Trade Center
Electrical/HVAC
Upgrade Program

TOWER ONE AND TWO
LOW VOLTAGE
SUBSTATIONS
CONSTRUCTION AND
INSTALLATION

ELECTRICAL
SUBSTATION SS-75S
STAGE II AND III
CONDUIT AND CABLE
SCHEDULE

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